

# Improvements to the Current Population Survey Annual Social and Economic Supplement and Implications for Estimates of Income, Poverty, and Health Insurance Coverage

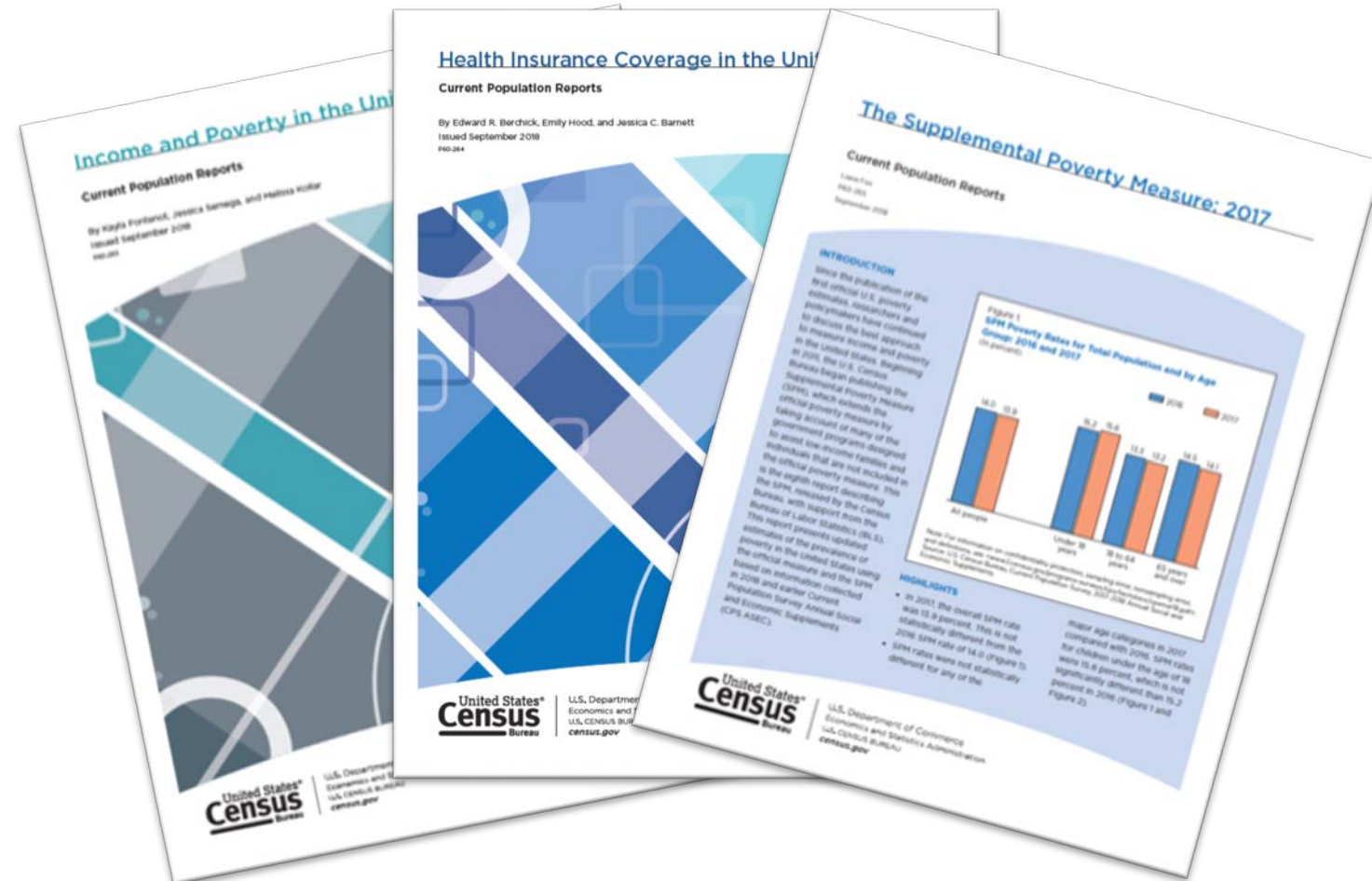
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Social, Economic and Housing Statistics Division

U.S. Census Bureau

# Current Population Survey Annual Social and Economic Supplement (CPS ASEC) Income, Poverty, Health Insurance Releases

- September 10<sup>th</sup> – 10 a.m. EDT
- Estimates for 2017 and 2018 will use the new processing system
- Estimates for 2017 may not be consistent with estimates released in September 2018 reports



# Outline

- Results of the CPS ASEC redesign
- Changes to the processing system
- Income/poverty results
- Health insurance results
- Census outreach and stakeholder engagement

# Results of the CPS ASEC Redesign

- Improved measurement of income, health insurance coverage and family relationships
- Specific information about defined contribution retirement plans
- Expanded health insurance measures:
  - Marketplace coverage
  - Subannual coverage
  - Coverage at the time of interview

# Redesign Implementation: Two Stages

## STAGE ONE: REDESIGN OF THE CPS ASEC QUESTIONNAIRE

- 2014** • Split Panel Test for Income – partial sample original questions, partial sample redesign  
• Redesigned health insurance questions – full sample
- 2015** • Income questions implemented for full sample (first year)  
• Health insurance questions implemented for full sample (second year)  
• Processed using old system
- 2016** • Relationship categories updated for half sample  
• Processed using old system
- 2017 and 2018** • Full implementation of the new relationship categories  
• Processed using old system

## STAGE TWO: UPDATED PROCESSING SYSTEM

- 2017 and 2018** • Re-processed using the new system  
• 2017 CPS ASEC Research File and 2018 CPS ASEC Bridge File
- 2019** • **Updated processing system implemented in production**

# Stage Two: Updated Processing System

## Income

- Ranges used in earnings and income imputation
- Income allocation flags changed
- Overhaul of all income edits and imputation
- Various other small fixes
  - Means-tested program benefit caps increased
  - Increased top codes for some income types

## Health Insurance

- More detail on types of plans that did not previously exist
- Uses subannual information to improve edits and consistency
- New imputation process that groups people into health insurance units and fills missing data based on unit
- Changes the categorization of TRICARE from public coverage to private coverage

# Stage Two: Updated Processing System - Income

## Income

- **Ranges used in earnings and income imputation**
- Income allocation flags changed
- Overhaul of all income edits and imputation
- Various other small fixes
  - Means-tested program benefit caps increased
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**Could you tell me if you earned**

- less than \$45,000,
- between \$45,000 and \$60,000, or
- \$60,000 or more

**for the TOTAL yearly amount from this employer before taxes and other deductions during 2016?**

**Did you earn**

- less than \$15,000,
- between \$15,000 and \$30,000, or
- \$30,000 or more

**from this employer during 2016?**

# Stage Two: Updated Processing System – Health Insurance



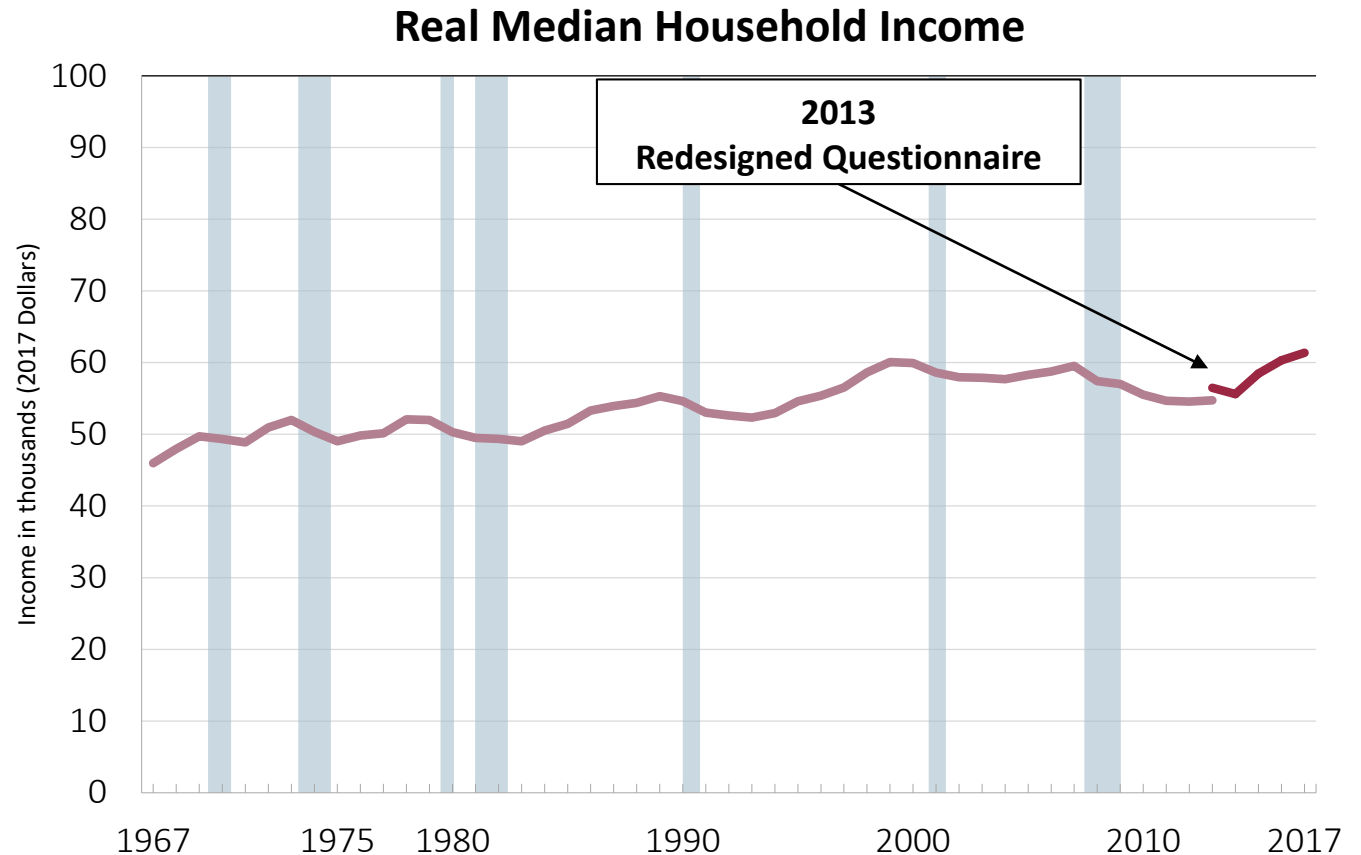
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# Redesign of CPS ASEC: Income Example

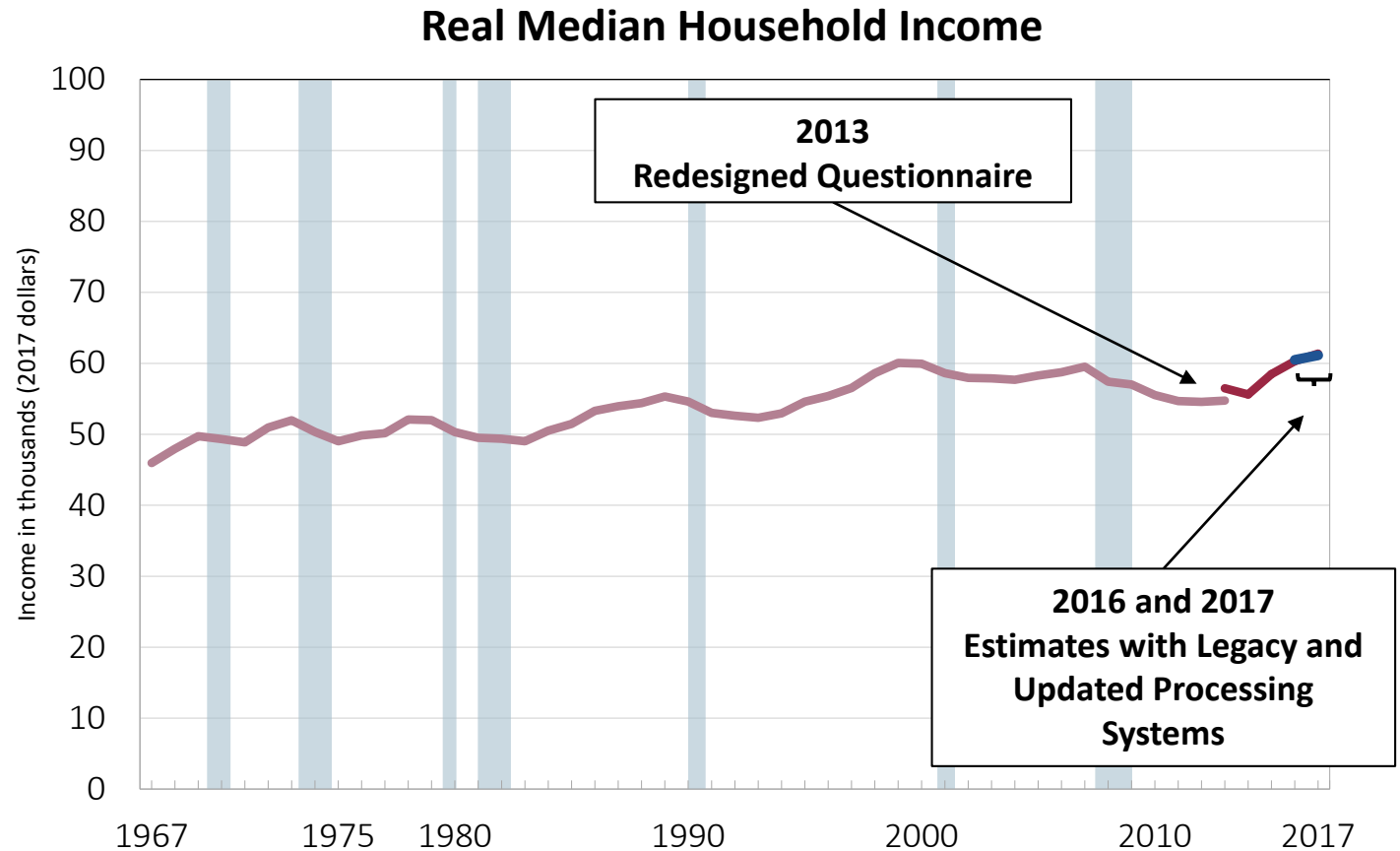
- Redesigned Questionnaire in 2014
  - Income in 2013 measured with both the old questions and the new questions



Source: Current Population Survey, 1968 to 2018 Annual Social and Economic Supplement.

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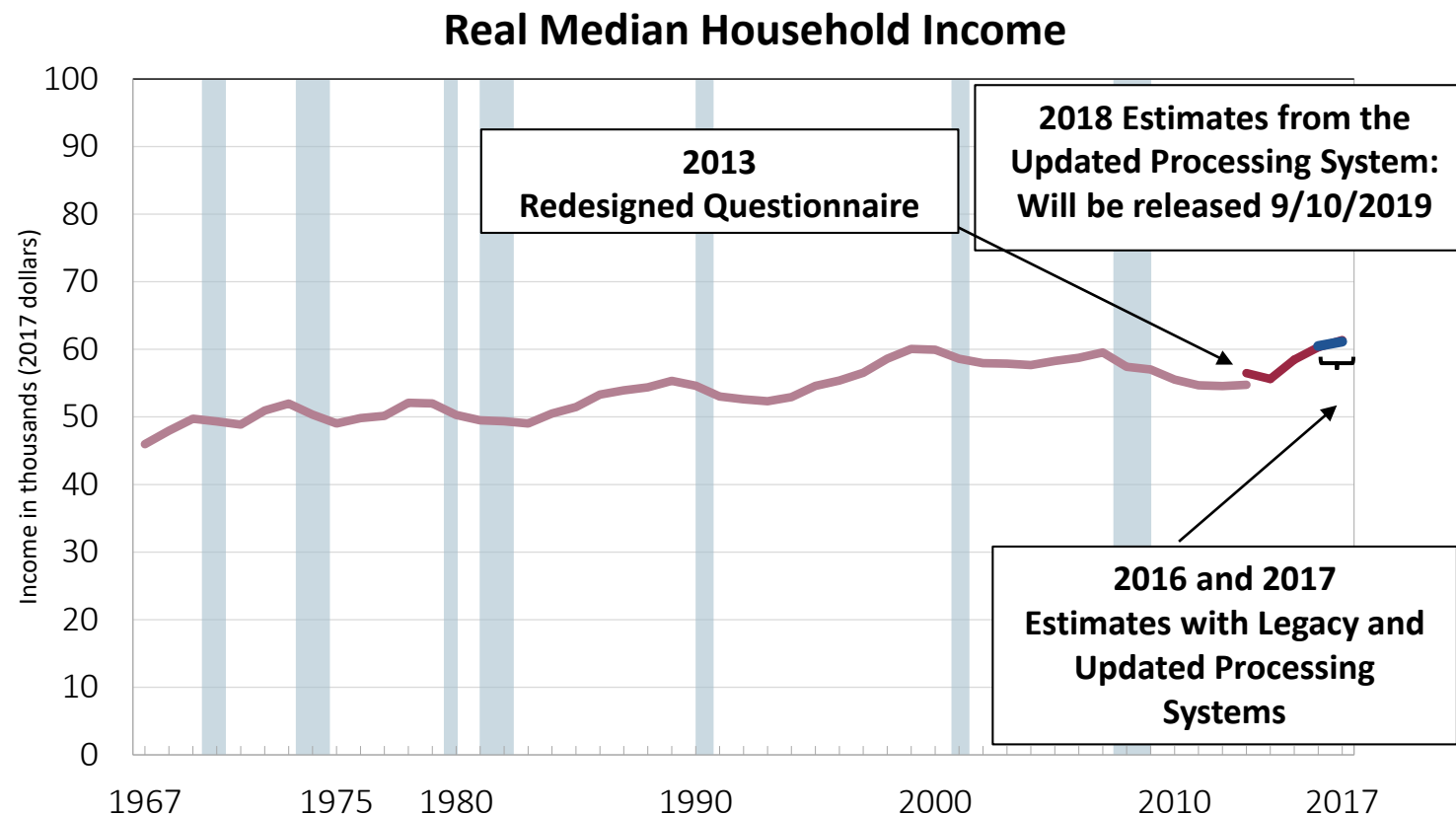
- Redesigned Questionnaire in 2014
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- Estimates for income years 2016 and 2017 with both the legacy and updated systems



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# Redesign of CPS ASEC: Income Example

- Redesigned Questionnaire in 2014
  - Income in 2013 measured with both the old questions and the new questions
- Estimates for income years 2016 and 2017 with both the legacy and updated systems
- Updating processing system in production in 2019
  - Income in 2018 uses the updated system
  - Year-to-year comparisons will use 2017 estimates from the updated system



Source: Current Population Survey, 1968 to 2018 Annual Social and Economic Supplement.

# Median Household Income for Select Subgroups: 2017 (in dollars)

Characteristic	Legacy	Updated	Percent Difference
All Households	61,370	61,140	-0.4
Family households	77,710	77,800	0.1
Nonfamily households	36,650	36,340	-0.8
<b>Race</b>			
White	65,270	64,830	-0.7*
White, not Hispanic	68,150	68,190	0.1
Black	40,260	39,370	-2.2*
Asian	81,330	81,390	0.1
Hispanic (any race)	50,490	50,170	-0.6
<b>Age</b>			
25 to 34 years	62,290	61,240	-1.7***
35 to 44 years	78,370	78,850	0.6
45 to 54 years	80,670	80,160	-0.6
55 to 64 years	68,570	68,900	0.5
65 years and older	41,130	41,300	0.4

Notes: All percentiles are calculated using linear interpolation.

\*\*\*, \*\*, and \* indicate statistical significance at the 1, 5, and 10 percent levels respectively.

Source: Current Population Survey, 2018 Annual Social and Economic Supplement.

# Household Income at the 95<sup>th</sup> Percentile for Select Subgroups: 2017

Characteristic	Legacy	Updated	Percent Difference
All Households	237,100	243,900	2.9***
Family households	264,500	275,300	4.1***
Nonfamily households	161,000	156,600	-2.7*
<b>Race</b>			
White	242,100	250,500	3.5***
White, not Hispanic	250,900	260,600	3.9***
Black	166,000	166,900	0.6
Asian	308,200	309,100	0.3
Hispanic (any race)	180,400	181,900	0.8
<b>Age</b>			
25 to 34 years	205,200	202,300	-1.4
35 to 44 years	258,500	262,200	1.4
45 to 54 years	272,600	281,500	3.2**
55 to 64 years	269,800	284,600	5.5***
65 years and older	188,500	198,400	5.3***

Notes: All percentiles are calculated using linear interpolation.

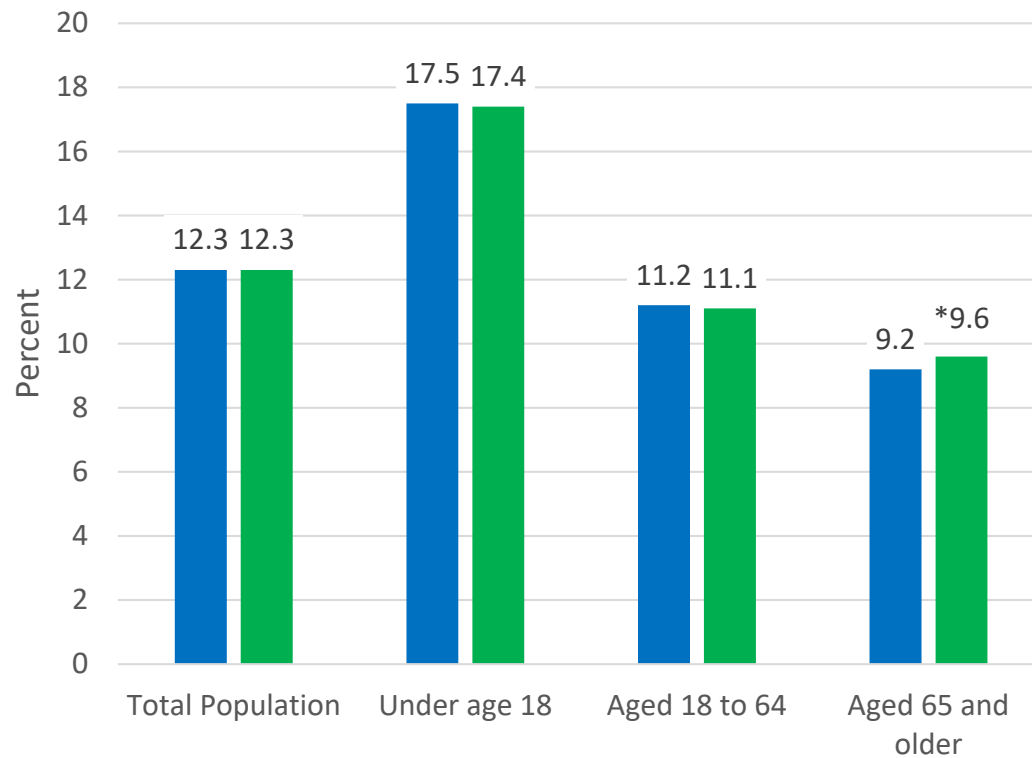
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# Impact on poverty estimates

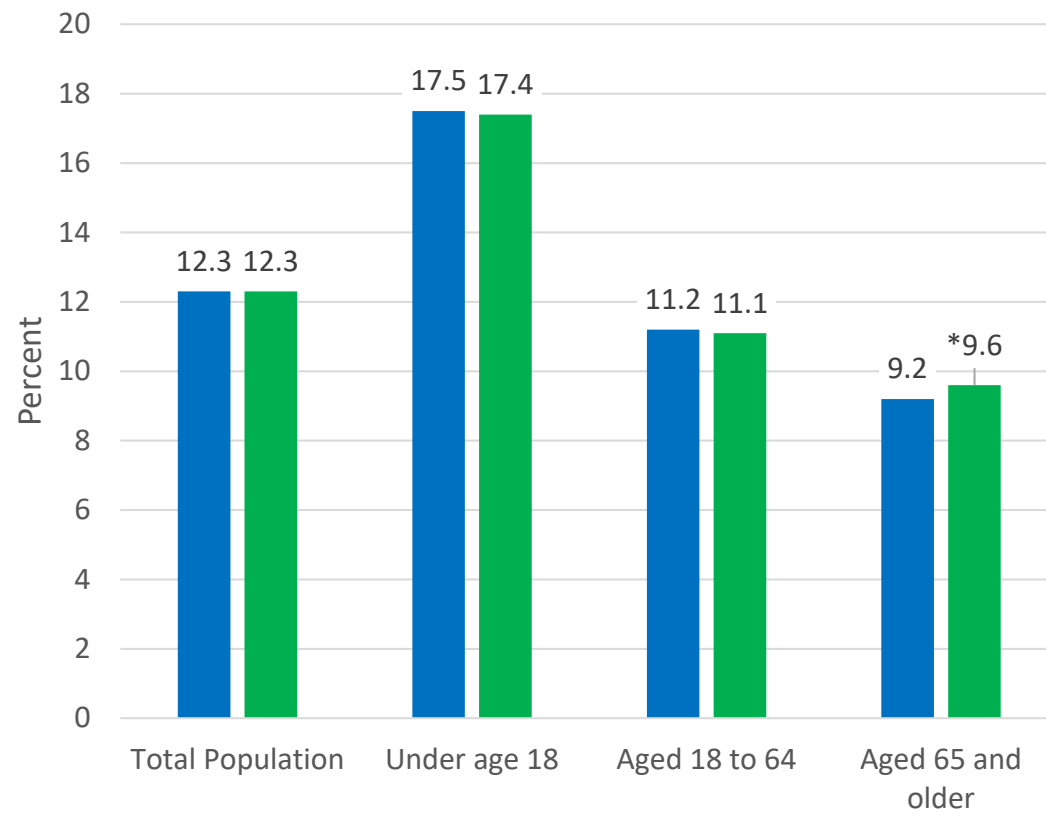
## Official Poverty: 2017

Legacy Updated

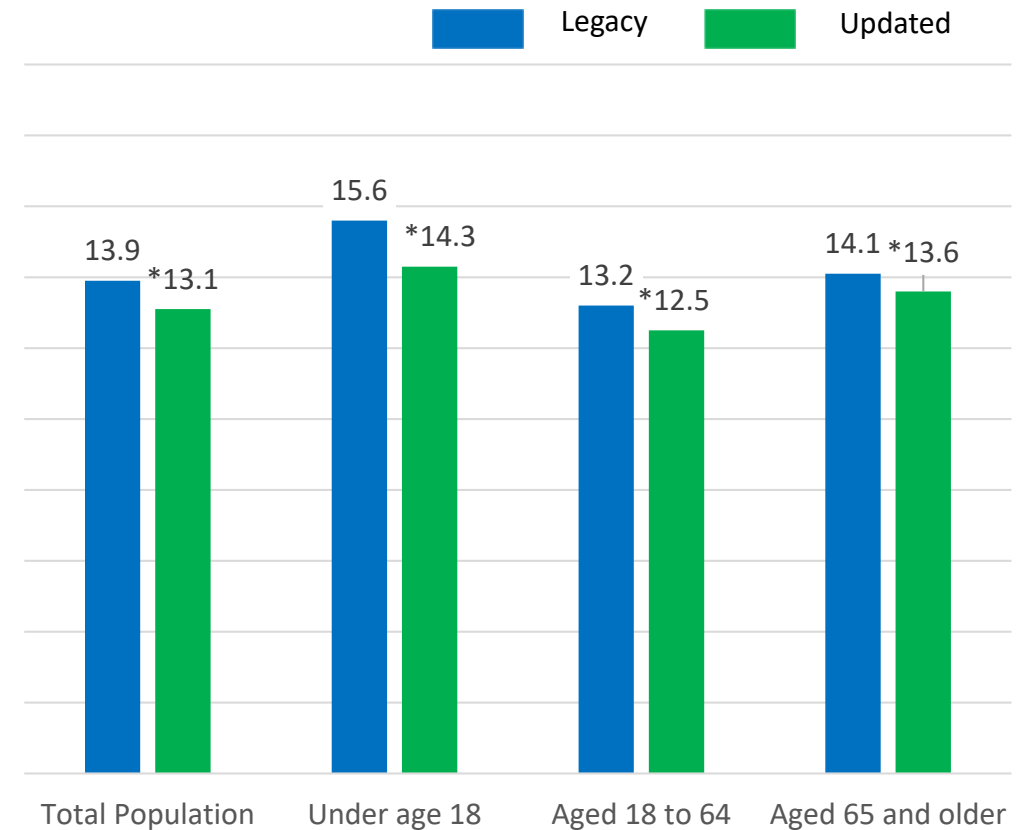


# Impact on poverty estimates

## Official Poverty: 2017



## Supplemental Poverty Measure (SPM): 2017

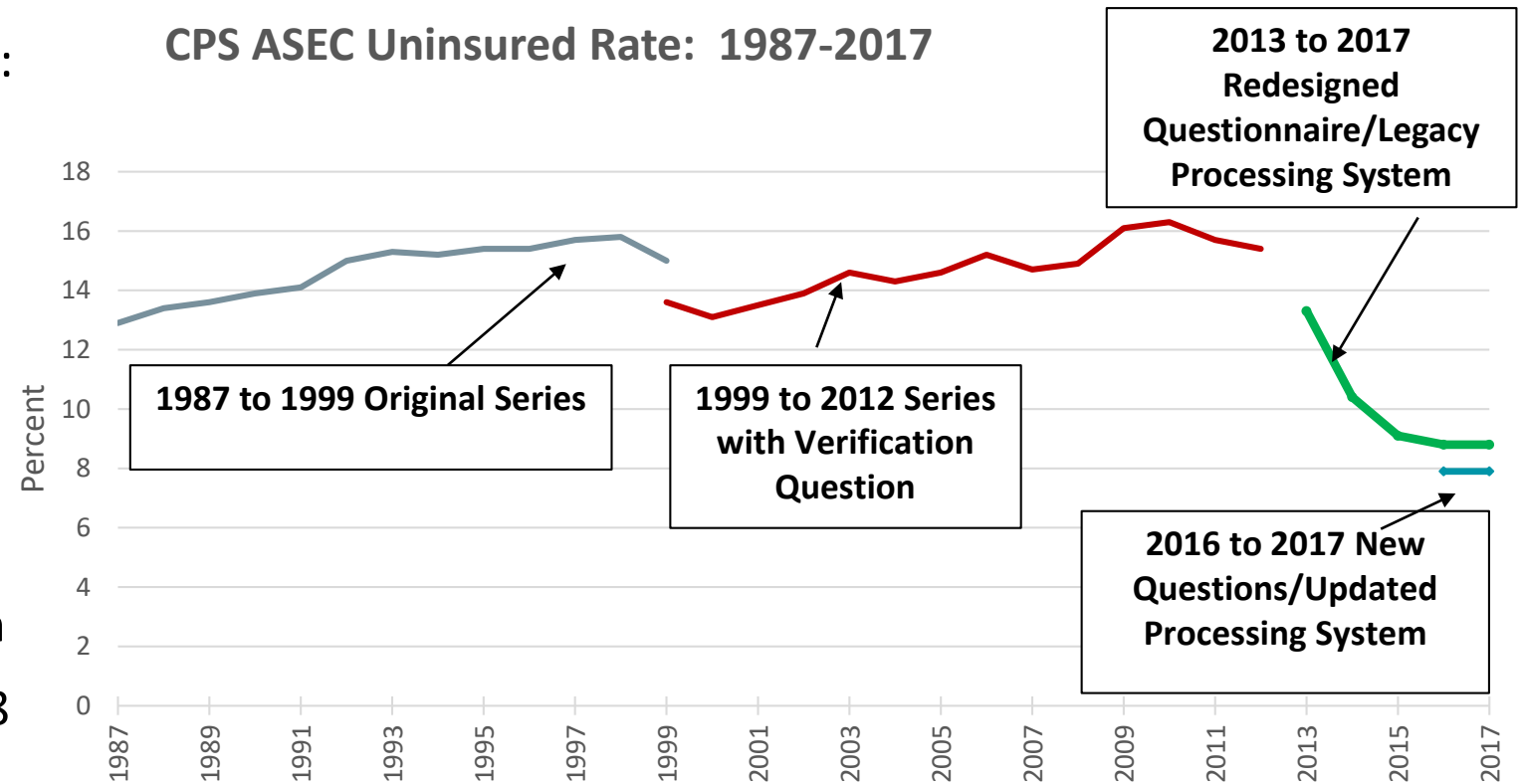


# Redesign of CPS ASEC: Health Insurance Example

Four distinct/noncomparable series:

- (1) 1987 to 1999 – Original Series
- (2) 1999 to 2012 – Addition of verification question
- (3) 2013 to 2017 – Redesigned questionnaire processed with the legacy processing system
- (4) 2016 to 2017 – New questions with Updated Processing System

For historical time trends from 2008 to present, we recommend using the American Community Survey.



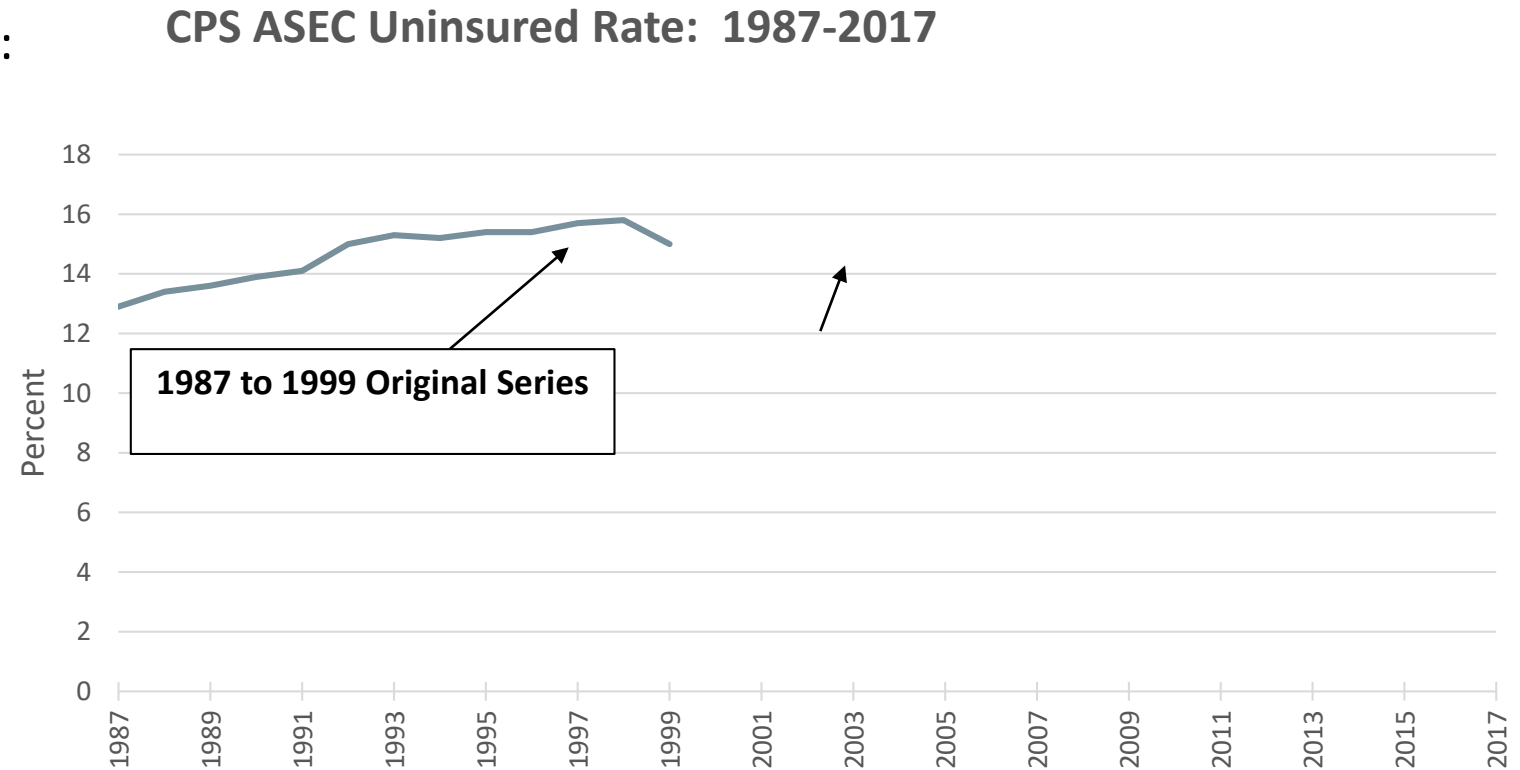
Source: Current Population Survey, 1988 to 2018 Annual Social and Economic Supplements.



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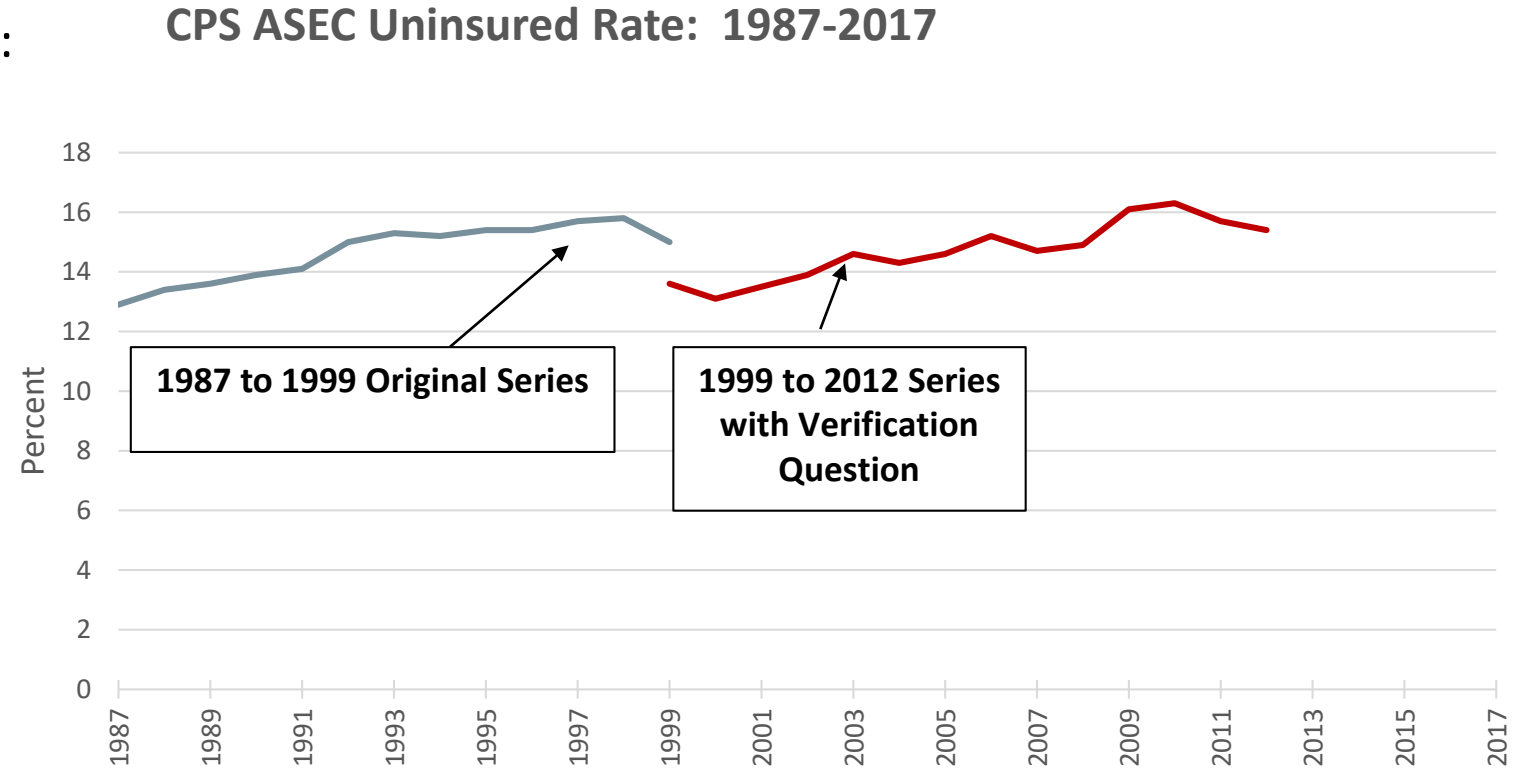


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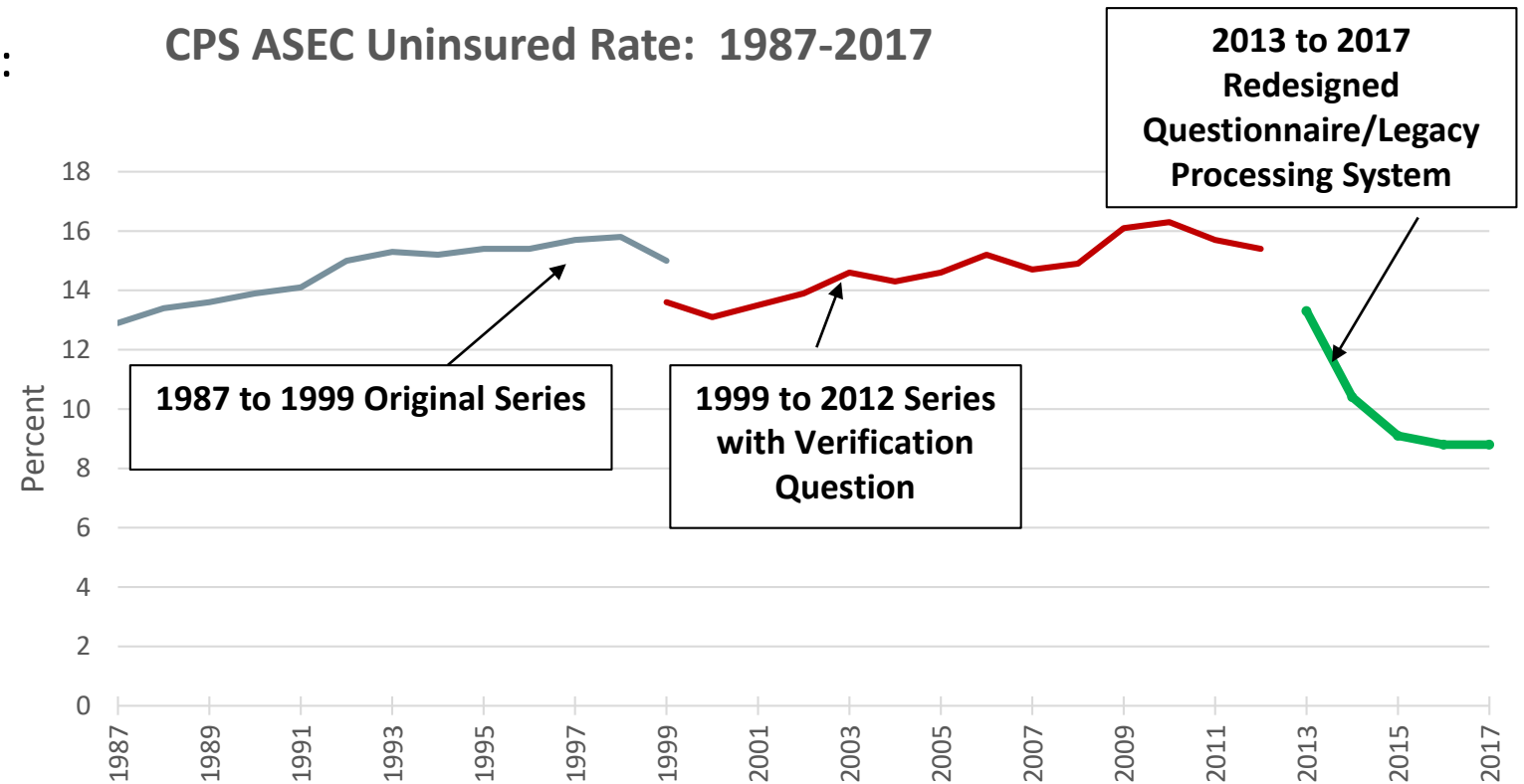


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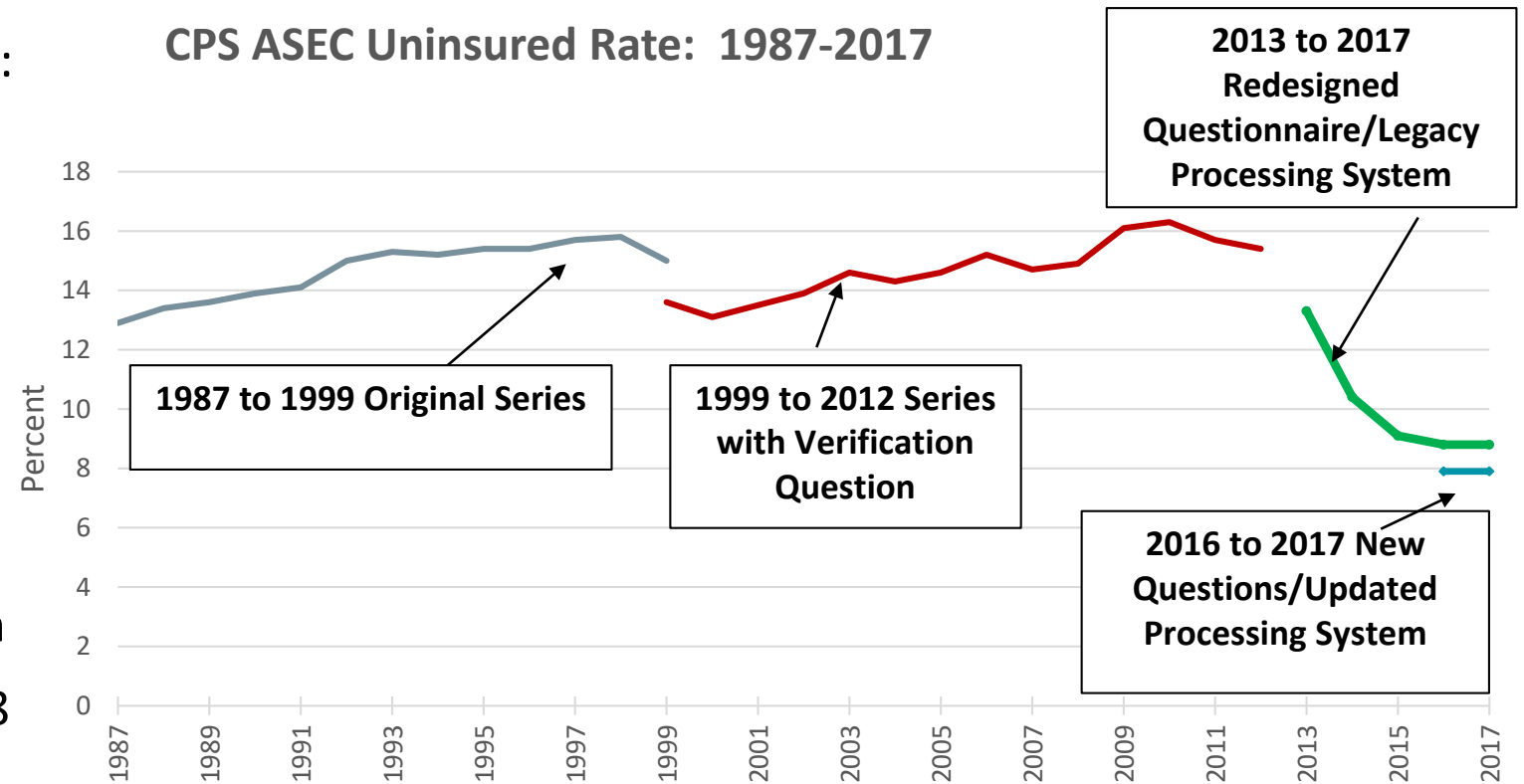
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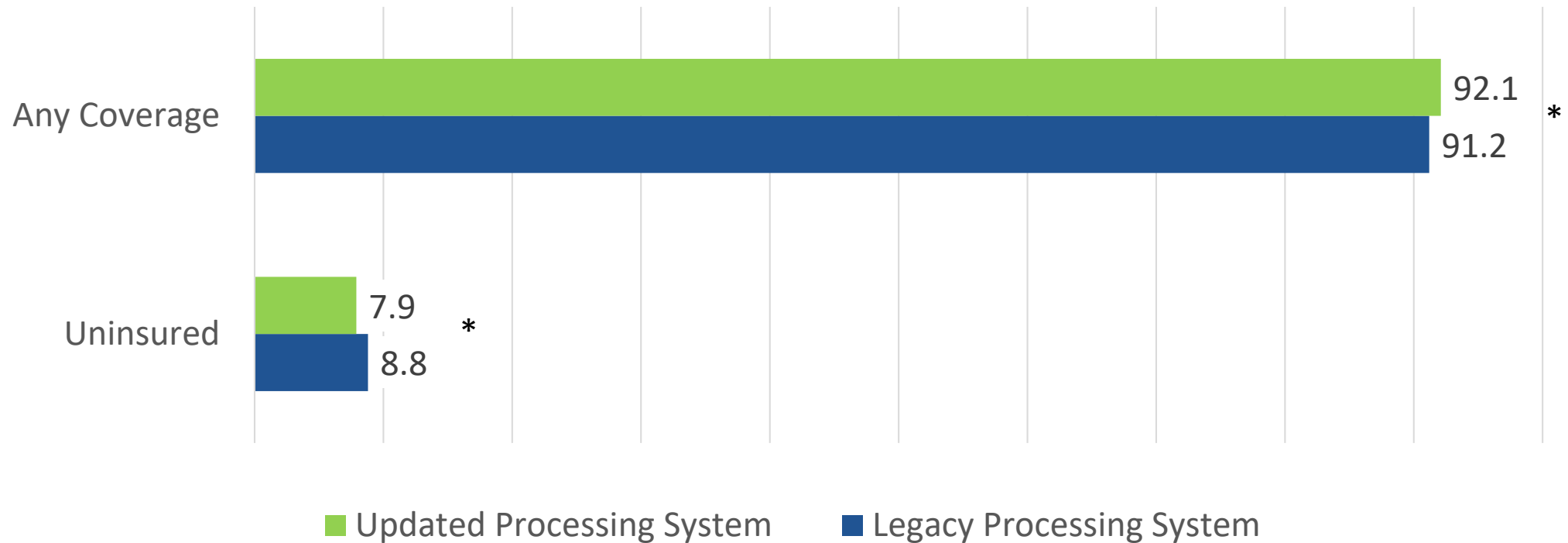
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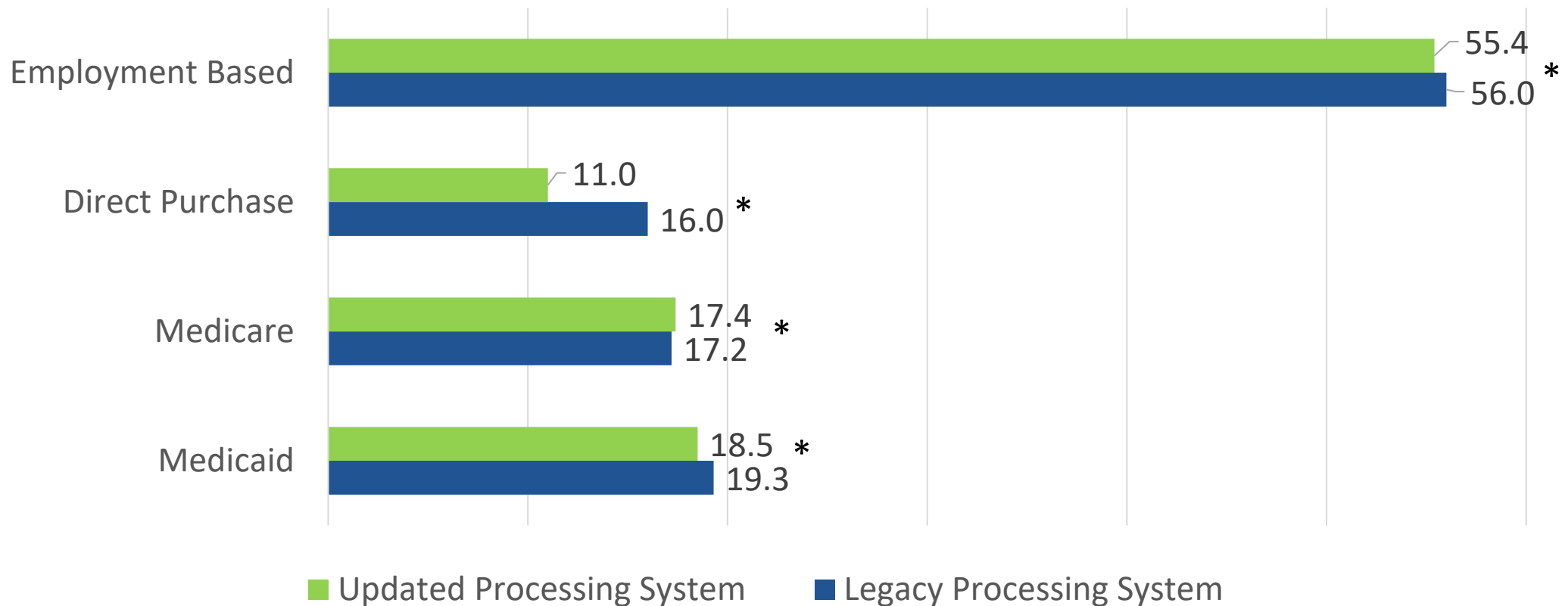


Source: Current Population Survey, 1988 to 2018 Annual Social and Economic Supplements.

# Differences in (Un)insured Rate: 2017



# Percentage of People by Select Coverage Types: 2017



# Communication and Stakeholder Engagement

- Research, evaluation, and documentation available
  - <https://www.census.gov/data/datasets/time-series/demo/income-poverty/cps-asec-design.html>
- Public Use Files with technical documentation online
  - 2017 CPS ASEC Research File – January 2019
  - 2018 CPS ASEC Bridge File – April 2019
- Research Matters blog and report appendixes have more details
- Conferences and expert user meetings
  - <https://www.census.gov/library/video/2019/cps-asec-processing-changes-implications.html>

# Summary

- Income, poverty and health insurance reports will include 2017 and 2018 estimates using the updated processing system.
- The CPS ASEC redesign has improved the quality of our data on income, poverty, health insurance and family relationships.
- Additional income estimates include:
  - More detailed information on defined-contribution retirement benefits
  - Improved imputation flags
  - Better data on interest and property income
- Additional health insurance measures include:
  - Marketplace coverage
  - Subannual coverage
  - Coverage at the time of interview
  - TRICARE separate from other types of military coverage



# Questions

- Enter instructions for callers to ask questions

# Income and Poverty in the United States: 2018

## Health Insurance Coverage in the United States: 2018

## The Supplemental Poverty Measure: 2018

### Online news conference

- Tuesday, Sept. 10<sup>th</sup>, 2019  
10 a.m. EDT
- The Census Bureau will broadcast the event live on  
<[www.census.gov/newsroom/census-live.html](http://www.census.gov/newsroom/census-live.html)>.
- Media may dial in to ask questions.  
Dial-in number: 1-888-942-8169  
Participant passcode: 7117029
- Questions and answers are limited to media.

# Thank you